

## Tentative Outline

### Special Thematic Issue for Combinatorial Chemistry & High Throughput Screening

#### Development and application of computational methods in biological and medical data

*Guest Editor: Hui Ding*

#### Aims & Scope:

With the development of high-throughput sequencing techniques, more and more biological and medical data is available, including DNA, RNA, protein and disease data. Using traditional biochemical method to identify and analyze these samples becomes more and more difficult because of its expensive experimental materials and long experimental period. To overcome the disadvantage, computational methods are a good choice. Thus, it is more and more popular to develop various artificial intelligence methods to discriminate molecular types, predict molecular function, identify drug targets and predict disease types because these techniques can extract the essential characteristics of research object and improve accuracies of models, which is needed by all biological scholars. This special issue will focus on various aspects of the development and application of artificial intelligence techniques in biological and medical data.

**Keywords:** Biological data, Medical data, and artificial intelligence

#### Subtopics:

The subtopics to be covered within this issue are listed below:

- The development and application of computational techniques in drug molecular identification.
- The application of computational method in proteins structure and function prediction.
- DNA regulatory element recognition using machine learning technique.
- Disease types identification using artificial intelligence method.
- The development of artificial intelligence method in RNA prediction.
- Developing new descriptor to formulate disease molecular network.
- The application of novel feature extraction methods for biological and medical data.

#### Schedule:

- ✧ Manuscript submission deadline: Dec. 1, 2019
- ✧ Peer Review Due: Jan. 1, 2020
- ✧ Revision Due: Feb. 1, 2020
- ✧ Announcement of acceptance by the Guest Editors: Feb. 15, 2020
- ✧ Final manuscripts due: March 1, 2020

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